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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

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PCT/EP03/06175

VERIFICATION OF A TRANSLATION

I, Susan ANTHONY BA, ACIS,

Director of RWS Group Ltd, of Europa House, Marsham Way, Gerrards Cross, Buckinghamshire, England declare:

That the translator responsible for the attached translation is knowledgeable in the German language in which the below identified international application was filed, and that, to the best of RWS Group Ltd knowledge and belief, the English translation of the amended sheets of the international application No. PCT/EP03/06175 is a true and complete translation of the amended sheets of the above identified international application as filed.

I hereby declare that all the statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the patent application issued thereon.

Date: November 22, 2004

Signature:

For and on behalf of RWS Group Ltd

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New claims 12.07.2004 Dres Re

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Claims

 Compositions for producing amino resin products by melt processing, characterized in that the compositions are composed of

- 1 -

- A) from 95 to 99.9% by mass of solvent-free meltable polycondensates of melamine resins having molar masses of 300 to 300 000, the melamine resin polycondensates being mixtures of meltable 4- to 1000- nucleus polytriazine ethers,
- B) from 0.1 to 5% by mass of weak acids as thermoinducible curing agents, composed of
- B1) acid formers of the type of blocked sulphonic acid of the general formula (I)

$$R_1$$
— SO_2 — O — R_2 (I)

 R_1 = unsubstituted or substituted aryl or biphenyl

$$R_2$$
 = 4-nitrobenzyl, pentafluorobenzyl or $\frac{CO-R_3}{N (R_4)(R_5)}$

substituents

where

 R_3 = non-substituted or substituted alkyl or aryl,

 R_4 = H, C_1 - C_{12} -alkyl, phenyl, C_2 - C_9 -alkanoyl or benzyl,

 $R_5 = H$, C_1 - C_{12} -alkyl or cyclohexyl,

or R_3 and R_4 or R_5 together with the atoms to which they are attached form a 5- to 8-membered ring which can be fused by 1 or 2 benzo radicals,

- B2) C₄-C₁₈ aliphatic and/or C₇-C₁₈ aromatic carboxylic acids,
- B3) alkali metal salts or ammonium salts of phosphoric acid,
- B4) C₁-C₁₂-alkyl esters or C₂-C₈-hydroxyalkyl esters of C₇-C₁₄ aromatic carboxylic acids or inorganic acids,

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- B5) salts of melamine or guanamines with C₁₋₁₈ aliphatic carboxylic acids,
- B6) anhydrides, monoesters or monoamides of C₄-C₂₀ dicarboxylic acids,
- B7) monoesters or monoamides of copolymers of ethylenically unsaturated C₄-C₂₀ dicarboxylic anhydrides and ethylenically unsaturated monomers of the type of C₂-C₂₀ olefins and/or C₈-C₂₀ vinylaromatics, and/or
- B8) salts of C₁-C₁₂-alkylamines and/or alkanolamines with C₁-C₁₈ aliphatic, C₇-C₁₄ aromatic or alkylaromatic carboxylic acids and also inorganic acids of the type of hydrochloric acid, sulphuric acid or phosphoric acid, and
- C) if desired, up to 400% by mass of fillers and/or reinforcing fibres, up to 30% by mass of other reactive polymers of the ethylene copolymer, maleic anhydride copolymer, modified maleic anhydride copolymer, poly(meth)acrylate, polyamide, polyester and/or polyurethane type, and up to 4% by mass, based in each case on the melamine resin polycondensates, of stabilizers, UV absorbers and/or auxiliaries.
- 2. Compositions according to Claim 1, characterized in that in the polytriazine ethers the triazine segments

 R_1 = -NH₂, -NH-CHR₂-O-R₃, -NH-CHR₂-O-R₄-OH, -CH₃, -C₃H₇, -C₆H₅, -OH, phthalimido-,

succinimido-, -NH-CO- $_{\text{C5-C18}}$ -alkyl, -NH-C $_{\text{5}}$ -C $_{\text{18}}$ -alkylene-OH,

ART 34 AMDT

-NH-CHR₂-O-C₅-C₁₈-alkylene-NH₂, -NH-C₅-C₁₈-alkylene-NH₂,

-NH-CHR₂-O-R₄-O-CHR₂-NH-, -NH-CHR₂-NH-,

-NH-CHR₂-O-C₅-C₁₈-alkylene-NH-,

-NH-C₅-C₁₈-alkylene-NH-, -NH-CHR₂-O-CHR₂-NH-,

 $R_2 = H$, C_1 - C_7 -alkyl;

 $R_3 = C_1 - C_{18} - alkyl, H;$

$$\begin{split} R_4 &= C_2\text{-}C_{18}\text{-}alkylene, -CH(CH_3)\text{-}CH_2\text{-}O\text{-}C_2\text{-}C_{12}\text{-}alkylene-O\text{-}}\\ &\quad CH_2\text{CH}(CH_3)\text{-}, -CH(CH_3)\text{-}CH_2\text{-}O\text{-}C_2\text{-}C_{12}\text{-}arylene-O\text{-}CH_2\text{-}}\\ &\quad CH(CH_3)\text{-}, -[CH_2\text{-}CH_2\text{-}O\text{-}CH_2\text{-}CH_2]\text{-}n\text{-}, -[CH_2\text{-}CH(CH_3)\text{-}O\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}ln\text{-},}\\ &\quad -[(CH_3)]\text{-}n\text{-}, -[-O\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}CH_2\text{-}ln\text{-},}\\ &\quad -[(CH_2)_{2\text{-}8}\text{-}O\text{-}CO\text{-}C_{6\text{-}C_{14}}\text{-}arylene\text{-}CO\text{-}O\text{-}(CH_2)_{2\text{-}8}\text{-}]\text{-}n\text{-},}\\ &\quad -[(CH_2)_{2\text{-}8}\text{-}O\text{-}CO\text{-}C_{2\text{-}C_{12}}\text{-}alkylene\text{-}CO\text{-}O\text{-}(CH_2)_{2\text{-}8}\text{-}]\text{-}n\text{-},}\\ &\quad \text{where } n = 1 \text{ to } 200; \end{split}$$

- sequences containing siloxane groups, of the type

- polyester sequences containing siloxane groups, of the type -[(X)_r-O-CO-(Y)_s-CO-O-(X)_r]-,

in which

$$X = \{(CH_2)_{2-8} - O - CO - C_{6-C_{14}} - arylene - CO - O - (CH_2)_{2-8} - or - \{(CH_2)_{2-8} - O - CO - C_{2-C_{12}} - alkylene - CO - O - (CH_2)_{2-8} - \};$$

$$C_{1}-C_{4}-\text{ alkyl} \qquad C_{1}-C_{4}-\text{ alkyl}$$

$$| \qquad | \qquad |$$

$$Y = -\{c_{6}-c_{14}-\text{arylene}-CO-O-\{\{Si-O-\{Si-O\}_{y}-CO-c_{6}-c_{14}.\text{arylene}-\}\}$$

$$| \qquad | \qquad |$$

$$C_{1}-C_{4}-\text{ alkyl} \qquad C_{1}-C_{4}-\text{ alkyl}$$

or

ART 34 AMDT

C₁-C₄- alkyl C₁-C₄- alkyl

APT 34 AMDT

r = 1 to 70; s = 1 to 70 and y = 3 to 50;

- polyether sequences containing siloxane groups, of the type

$$\begin{array}{c|cccc} C_{1}\text{-}C_{4}\text{-} & \text{alkyl} & C_{1}\text{-}C_{4}\text{-} & \text{alkyl} \\ & & | & | & | \\ & -\text{CH}_{2}\text{-}\text{CHR}_{2}\text{-}\text{O-}(\{Si\text{-}O\text{-}[Si\text{-}O]_{y}\text{-}\text{CHR}_{2}\text{-}\text{CH}_{2}\text{-} \\ & & | & | \\ & C_{1}\text{-}C_{4}\text{-} & \text{alkyl} & C_{1}\text{-}C_{4}\text{-} & \text{alkyl} \end{array}$$

where $R_2 = H$; C_1 - C_4 -alkyl and y = 3 to 50;

- sequences based on alkylene oxide adducts of melamine, of the type of 2-amino-4,6-di-_{C2-C4}-alkyleneamino-1,3,5-triazine sequences;
- phenol ether sequences based on dihydric phenols and C₂-C₈ diols, of the type of
 -C₂-C₈-alkylene-O-C₆-C₁₈-arylene-O-C₂-C₈-alkylene- sequences;

are linked by bridge members -NH-CHR₂-NH- or-NH-CHR₂-O-R₄-O-CHR₂-NH- and -NH-CHR₂-NH- and also, where appropriate, -NH-CHR₂-O-CHR₂-NH-, -NH-CHR₂-O-C₅-C₁₈-alkylene-NH- and/or -NH-C₅-C₁₈-alkylene-NH- to form 4- to 1 000-nucleus polytriazine ethers with a linear and/or branched structure.

in the polytriazine ethers the molar ratio of the substituents $R_3:R_4$ = 20:1 to 1:20, the proportion of the linkages of the triazine segments through bridge members -NH-CHR₃-O-R₄-O-CHR₃-NH- being from 5 to 95 mol%, and it being possible for the polytriazine ethers to

ART 34 ANNOT

contain up to 20% by mass of diols of the type HO-R₄-OH.